Title (en)

METHOD AND APPARATUS FOR STABILISING A PLASMA

Title (de)

VERFAHREN UND GERÄT ZUR STABILISIERUNG EINES PLASMAS

Title (fr)

PROCEDE ET APPAREIL DE STABILISATION D'UN PLASMA

Publication

EP 1088329 B1 20041027 (EN)

Application

EP 00919057 A 20000412

Priority

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- GB 9914689 A 19990624

Abstract (en)

[origin: WO0062328A1] A workpiece is processed in a chamber by striking a plasma in the chamber, treating the workpiece by cyclically adjusting the processing parameters between at least a first step having a first set of processing parameters and a second step having a second set of process parameters, wherein the plasma is stabilised during the transition between the first and second steps. These steps may comprise cyclic etch and deposition steps. One possibility for stabilising the plasma is by matching the impedance of the plasma to the impedance of the power supply which provides energy to the plasma, by means of a matching unit which can be controlled in a variety of ways depending upon the step type or time during the step. Another possibility is to prevent or reduce substantially variation in the pressure in the chamber between the first and second steps.

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H01J 37/32; H01L 21/3065

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CPC (source: EP KR US)

H01J 37/321 (2013.01 - EP US); **H01J 37/32935** (2013.01 - EP US); **H01L 21/3065** (2013.01 - KR); **H01L 21/30655** (2013.01 - EP US)

Citation (examination)

EP 1064416 A1 20010103 - APPLIED MATERIALS INC [US]

Cited by

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